

NIAID INITIATIVES IN LIVER DISEASE RESEARCH

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NIAID LIVER DISEASE RESEARCH

■ Microbes

– Viruses

- HAV, HBV, HCV, HDV, HEV, others

- HIV co-infection

– Parasites

- *Schistosoma*, *Entamoeba*

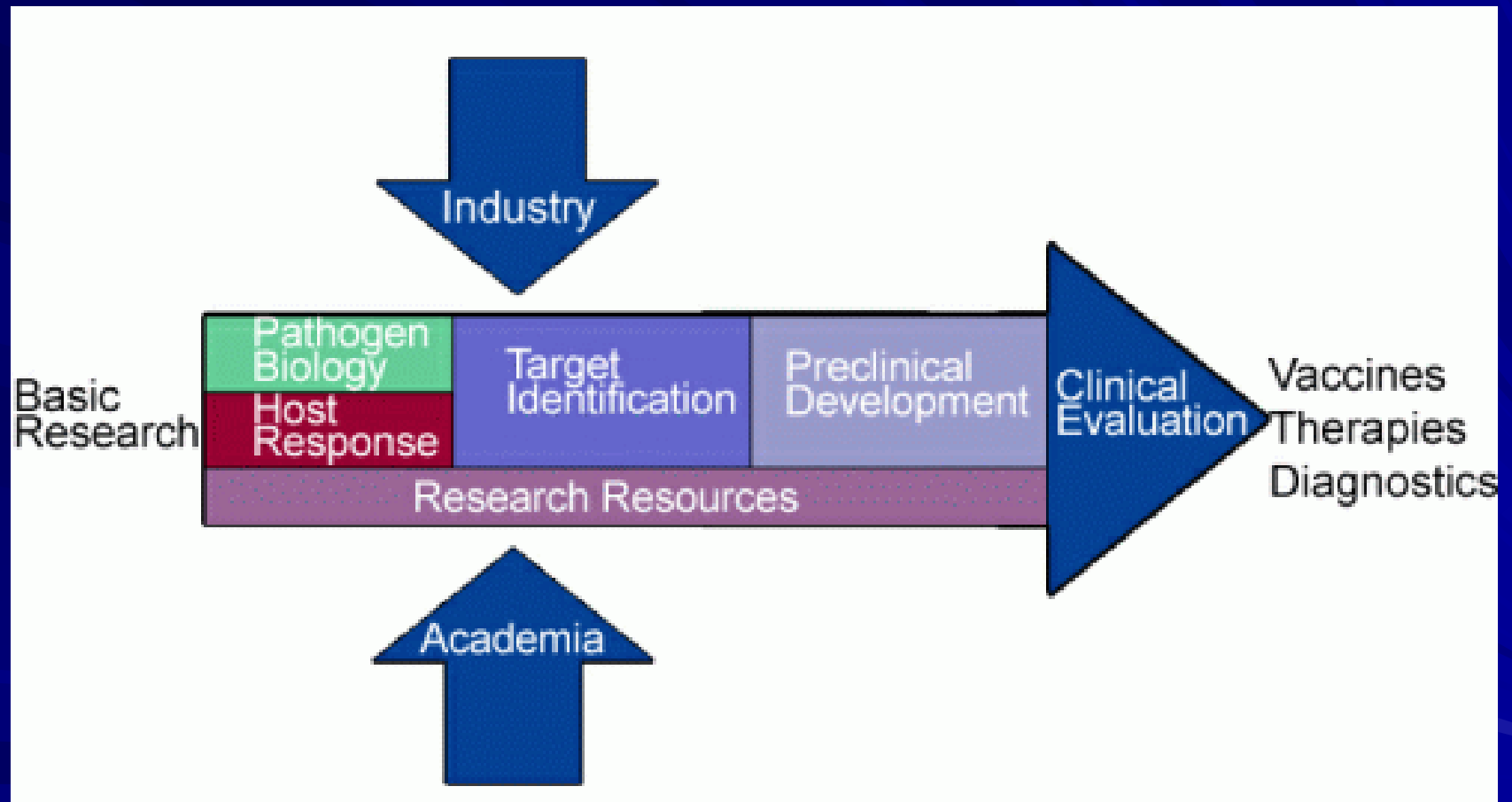
– Unidentified

- Primary biliary cirrhosis

■ Non-Microbes

– Auto-immune

NIAID LIVER DISEASE RESEARCH



NIAID LIVER DISEASE RESEARCH

BASIC RESEARCH: *in vitro*,
animal models, patients

Pathogen Biology

Host Response

■ Covering

- replication
- pathogenesis/immunopathogenesis
- structure/ function
- immune response
- natural history

NIAID LIVER DISEASE RESEARCH

BASIC RESEARCH: *in vitro*,
animal models, patients

Pathogen Biology

Host Response

- **RFA: Hepatitis C Cooperative Research Centers**
 - multidisciplinary, basic and clinical, model system development
- **Several PAs: Complications of HIV Infection – hemophilia, antiretroviral therapy**

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BASIC RESEARCH: *in vitro*,
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Pathogen Biology

Host Response

- **International Collaborations in Tropical Disease Research**
- **Tropical Medicine Research Centers**

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Target
Identification

**TRANSLATIONAL
RESEARCH**

Preclinical
Development

- **In Vitro Antiviral Screening Program**
 - HBV, HCV
- **Animal Model Evaluation of Candidate Hepatitis Therapies**
 - HBV
- **Partnership Grants for Novel Hepatitis B Therapies**

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Clinical
Evaluation

CONTRACTS

- Collaborative Antiviral Studies Group
Polyclonal antibody safety and PK in liver transplant patients completed
- Vaccine and Treatment Evaluation Units
Phase 1 HCV vaccine study enrolling
- Adult AIDS Clinical Trial Units
Longstanding co-infection studies
New direction mono-infection studies

GRANTS

- Cooperative Agreements
- SBIRs

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Research Resources Examples

- **Hepatitis C Sequence Database**

Hepatitis C Immunology Database under construction

<http://hcv.lanl.gov>

- **Research and Reference Reagents**

<http://www.aidsreagent.org/>

- **NIAID Tetramer Facility**

<http://www.niaid.nih.gov/reposit/tetramer/index.html>